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Education

Ph.D., Stanford University, 1982. Physics (area of research superconductivity).

M.S., Stanford University, 1979. Physics

B.S., Stanford University, 1976. With Distinction in Physics. Also extensive coursework in chemistry and mathematics.

Honors

David S. Levine Award, outstanding undergraduate physics major, Stanford, 1975.

Courses taught in general physics, mechanics, electricity & magnetism, physical science, and laboratory courses.

Acting Instructor -
TA's.

Stanford University. Gave course to improve teaching of physics

Senior Teaching -
Assistant

Stanford University. Responsible for 20 TA's in first year physics courses for engineering and natural science majors.

List of Publications:

1. "Tunneling $\alpha^2F(\omega)$ as a Function of Composition in A15 NbGe" K.E. Kihlstrom and T.H. Geballe, Phys. Rev. B 24, 4101 (1981).
2. "Preparation, Tunneling, Resistivity, and Critical Current Measurements on Homogeneous High T_c A15 Nb₃Ge Thin Films" K.E. Kihlstrom, R.H. Hammond, J. Talvacchio, T.H. Geballe, A.K. Green and Victor Rehn, J. Appl. Phys. 53, 8907 (1982).
3. "Tunneling $\alpha^2F(\omega)$ and Heat Capacity Measurements in High- T_c Nb₃Ge" K.E. Kihlstrom, D. Mael, and T.H. Geballe, Phys. Rev. B 29, 150 (1984).
4. "Local Environment Model for Cluster Formation and Percolation in Amorphous Mo-Si Alloys" A.S. Edelstein, K.E. Kihlstrom, S.A. Wolf, W.T. Elam, Characterization and Behavior of Materials with Sub-Micron Dimensions edited by J.T. Weber (World Scientific, Singapore 1985) p. 193.
5. "Superconductivity in FCC Mo_xNb_{1-x}NyC_{1-y} Thin Films" S.A. Wolf, S.B. Qadri, K.E. Kihlstrom, E.F. Skelton, R.W. Simon, W.W. Fuller, D.U. Gubser, IEEE Trans Magn. MAG-21, 839 (1985).
6. "Preparation and Characterization of FCC Mo_xNb_{1-x}(C_yN_{1-y})_z Thin Films" D.U. Gubser, K.E. Kihlstrom, R.W. Simon, E.F. Skelton, S.B. Qadri, W.W. Fuller, and S.A. Wolf, J. Vac. Sci. Technol A3, 644 (1985).
7. "Tunneling $\alpha^2F(\omega)$ on V₃Si Thin Films" K.E. Kihlstrom, Phys. Rev. B 32, 2891 (1985).
8. "Tunneling $\alpha^2F(\omega)$ from Sputtered Thin-Film NbN" K.E. Kihlstrom, R.W. Simon, and S.A. Wolf Phys. Rev. B 32, 1843 (1985).
9. "Tunneling $\alpha^2F(\omega)$ on High T_c A15 and B1 Compounds" K.E. Kihlstrom, Physica B 135, 198 (1985).
10. "Phase-separated Fe and Co Particles in a BN matrix" A.S. Edelstein, B.N. Dos, R.L. Holtz, N.C. Koon, M. Rubenstein, S.A. Wolf and K.E. Kihlstrom, J. Appl. Phys. 61, 3320 (1987).
11. "Evidence for Nonphononic Superconductivity in Nb₃Ge" K.E. Kihlstrom, P.D. Hovda, Vladimir Z. Kresin, and S.A. Wolf, Novel Superconductivity edited by V.Z. Kresin (Plenum, New York 1987) p. 95.
12. "Effect of Adsorption on Thin Silver Films on the Phosphorescent Triplet State of 4-Benzoylpyridine" K.E. Kihlstrom, K.A. Martin, and A.M. Nishimura, J. Phys. Chem., 92, 2932 (1988).

13. "Evidence of Nonphononic Superconductivity in Nb₃Ge" K.E. Kihlstrom, P.D. Hovda, Vladimir Z. Kresin, and S.A. Wolf, Phys. Rev. B 38, 4588 (1988).

14. "Tunneling $\alpha^2 F(\omega)$ in Thin-Film Nb as a Function of Thickness" K.E. Kihlstrom, D.A. Collins, and S. I. Park, Phys. Rev. B 39, 257 (1989)
15. "Eliashberg Theory and High-Tc Superconductivity" R. Baquero, J. Gutierrez-Ibarra, L. Meza, O. Navarro, and K.E. Kihlstrom, Revista Mexicana de Fisica 35, 461 (1989).
16. "Review of Thin Film Superconductivity" K.E. Kihlstrom, proceedings of 3rd International SAMPE Electronic Conference, Los Angeles, CA p. 590 (1989).
17. "Thin Film Materials" K.E. Kihlstrom, Metals Handbook, 10th ed., Vol 2 (ASM International Cleveland, 1990) p. 1081.
18. "High Performance Shift Register for the 10 GHz Hybrid Superconducting Digital System" Aleksandar Pance, Jon S. Martens, Andrew Barfknecht, Jay E. Fleischman, Ken. E. Kihlstrom, and Stephen R. Whiteley, Extended Abstracts of the International Superconductive Electronics Conference, Boulder, CO p. 104 (1993).
19. "Dual Beam Atomic Absorption Spectroscopy for Controlling Thin Film Deposition Rates" S.J. Benerofe, C.H. Ahn, M.M. Wang, K.E. Kihlstrom, K.B. Do, S.B. Arnason, M.M. Fejer, T.H. Geballe, M.R. Beasley, and R.H. Hammond, J. Vac. Sci. Technol. B 12, 1217 (1994).
20. "Surface Study of YBa₂Cu₃O_{7- δ} Epitaxial Films Cleaned by an Atomic Oxygen Beam" N. Terada, C.H. Ahn, D. Lew, Y. Suzuki, K.E. Kihlstrom, K.B. Do, S.B. Arnason, T.H. Geballe, R.H. Hammond, and M.R. Beasley, Appl. Phys. Lett. 64, 2581 (1994).
21. "Photoemission and tunneling study of epitaxial YBa₂Cu₃O_{7- δ} films cleaned using an atomic oxygen beam" N. Terada, C.H. Ahn, D. Lew, Y. Suzuki, K.E. Kihlstrom, K.B. Do, S.B. Arnason, T.H. Geballe, R.H. Hammond, and M.R. Beasley, Physica C, 235-240, pt.2, 1061 (1994).
22. "Use of 2-dimensional arrays to determine the uniformity of Josephson junctions" J.S. Martens, K. Char, A. Pance, L.P. Lee, M.E. Johansson, S.R. Whiteley, K.E. Kihlstrom, J.R. Wendt, V.M. Hietala, T.A. Plut, G.A. Vawter, S.Y. Hou, J.M. Phillips, and W.Y. Lee, IEEE Transactions on Applied Superconductivity 3, 3095 (1994).
23. "Microwave Loss and Intermodulation in Tl₂Ba₂CaCu₂O_y Thin Films" Balam A. Willemsen, K.E. Kihlstrom, T. Dahm, D.J. Scalapino, B. Gowe, D.A. Bonn, W.N. Hardy, Phys. Rev. B 58, 6650 (1998).
24. "Unusual Power Dependence of Two-Tone Intermodulation in HTS Microwave Resonators", Balam A. Willemsen, K.E. Kihlstrom and T. Dahm, Appl. Phys. Lett. 74, 753 (1999).

Invited Talks

Eighteen Invited talks including 1985 Gordon Conference on Superconducting films, the 1989 International SAMPE Electronic Conference, Los Angeles; research seminars at Stanford (1981), Naval Research Lab (1982, 1985), Westinghouse (1982), Univ. of Florida (1984), Indiana Univ. (1984), Washington Univ. (1984), UCLA (1984), Yale (1984).